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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/214,840 01/13/99 HAMMER

K 051009/0114

EXAMINER

IM52/0226

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HON. C
ART UNIT

PAPER NUMBER

1732
DATE MAILED:

02/26/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/214,840

Applicant(s)

HAMMER ET AL.

Examiner

Sow-Fun Hon

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2000 (letter)
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

1. In response to Paper # 6 (08/01/00) one specification with claims has been acknowledged as the English language equivalent of WO 97/31970. The set of claims previously unexamined, is acknowledged as the correct claims corresponding to that which was filed as US Serial No. 09/214,840.

Claim Objections

2. Claim 12 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on another multiple dependent claim. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 provides for the use of a tubular shaped article, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. *The claim should recite "method of using ..."*.

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Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

8. Claims 6-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Hammer et al. (US Patent 5,736,179). Hammer et al. have a cellulose-based tubular foodstuffs casing having a coating on its inner and/or outer surface. The foodstuffs casing are made of hydrated cellulose (column 1, lines 5-13). Hammer et al. teach that the tubing is treated with cellulytic enzymes (column 5, lines 8-12). The example given by Hammer et al. of an cellulytic enzyme is cellulase (column 1, lines 40-52). The casings can be double-treated with viscose (column 2, lines 68). Hammer et al. teach that the to have a smooth inner surface, it is advantageous to add an oil emulsion to prevent adhesion (column 3, lines 5-10).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US Patent 4,388,331) in view of Hammer et al. (US Patent 5,262,211).

Miller et al. has a method to produce an improved collagen sausage casing by introducing a proteolytic enzyme to the collagen gel whereby the enzyme is immobilized and becomes non-functioning as the free water that is required for its activities is restricted by the further steps of the process (abstract). Miller et al. teach that the enzyme is rendered non-functioning within 25 to 30 minutes, wherein the degree of degradation is insufficient to cause a significant reduction in the tensile strength of the casing (column 4, lines 1-11). Miller et al. teach that when the sausage is smoked or cooked, the enzyme is reactivated to tenderize the casing (column 2, lines 1-10). Miller et al. teach that the term "non-functioning" means that the enzyme is inactivated but not destroyed and may be reactivated by placing the casing into the proper environment for the enzyme to function (column 2, lines 24-30). Miller et al. teach that the enzymes may be rendered non-functioning by a variety of different mechanisms depending on the particular enzyme employed. A specific example given is the use of a shift in pH to inactivate (column 3, lines 43-46). The concentration of the enzyme in the casing gel is taught to be between 0.001 and 0.5 % based on the collagen solids (column 3, lines 13-21). Miller et al. fail to teach the claimed cellulose casing and cellulolytic enzyme.

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Hammer et al. has a tubular foodstuff casing based on cellulose hydrate which preferably containing a fiber reinforcement in its wall, for example consisting of paper made of hemp fibers. These sausage casings called fibrous skin are used in particular for high-diameter sausages (column 3, lines 38-45). Hammer et al. teach the use of a fungicidal compound to *indirectly* prevent cellulose degradation by cellulolytic enzymes (cellulase) since it prevents the growth of molds which produce the enzymes (column 5, lines 35-40).

Therefore it would have been obvious to one of ordinary skill in the art to have used the teachings of Hammer et al. on the degradation of fiber-reinforced hydrated cellulose casings by cellulase to extend the method of Miller to obtain a method of tenderizing hydrated cellulose casings.

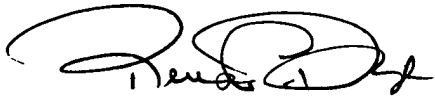
One of ordinary skill in the art would have known the pH and temperature ranges in which cellulase is most active.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary examiner, Rena Dye, can be reached on (703)308-4331. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

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02/14/07


RENA L. DYE
PRIMARY EXAMINER
Tech Center 1700